## Classification of the Leafbeetles from Korea

Part III. Subfamily Criocerinae (Coleoptera: Chrysomelidae)

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#### ABSTRACT

The present paper treats all 25 species of 4 genera of Criocerinae recorded from Korea, of them a species is newly recorded and two species probably do not occur in the country. Keys to all genera and species discussed here are given.

#### INTRODUCTION

This paper is the third in a series of the taxonomy of Korean leafbeetles. Since two species of Criocerinae have been recorded from Korea by Heyden (1887) for the first time, to date 25 species of 4 genera have been recorded from this country.

Some species of this genera are important pests, for example, *Oulema oryzae* (Kuwayama) attacks rice plant and often causes serious demage in highlands of this country.

The present paper treats 25 species belonging to 4 genera, of these a species is recorded from the country for the first time and the occurrence of two species in the area is questionable.

Keys are presented to both genera and species, and attempt is made to present all principal geographical records, domestic collected localities and host plants for the species.

The provinces are abbreviated as following for convinience:

 $\mathbb{CB}$ : Chungcheongbugdo HB: Hamgyeongbugdo  $\mathbb{CN}$ : Chungcheongnamdo  $\mathbb{HN}$ : Hamgyeongnamdo GB: Gyeongsangbugdo JB: Jeollabugdo GG: Gyeonggido JJ: Jejudo GN: Gyeongsangnamdo  $\mathbb{J}\mathbb{N}$ : Jeollanamdo

GW: Gangweondo

## Subfamily CRIOCERINAE

## Key to Korean Tribes of Criocerinae

## Tribes Criocerini Heinze, 1962

## Key to Korean Genera of Criocerini

### Genus 1. Crioceris Müller, 1764

Crioceris (Geoffroy, 1762, Hist. Ins. Paris 1: 237; nom. nud.) Müller, 1764, Faun. Ins. Fridr.: 13.

## Key to Korean species of Crioceris

- 1. Crioceris duodecimpunctata dodecastigma (Suffrian, 1841)

Lema dodecastigma Suffrian, 1841, Stett. Ent. Zeit. 2: 40.

Crioceris duodecimpunctata (Linne) var. dodecastigma: Chûjô, 1940, Trans. Nat. Hist. Soc. Form. 30(204): 350 <sup>1</sup>.

Crioceris orientalis var. choi Chûjô, 1941, Ibid. 31: 452(Korea).

Crioceris duodecimpunctata Linne var. dodecastigma: Cho, 1957, Hum. & Sci., Nat. Sci., Kor. Univ. 2: 234-235 (Korea).

Crioceris duodecimpunctata dodecastigma + C. orientalis choi: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 40<sup>2</sup>.

Crioceris duodecimpunctata dodecastigma + C. orientalis choi: Cho, 1965, Sci. Techn. Nat. Sci. Kor. Univ. 7: 106-107 (Korea).

Crioceris duodecimpunctata: Kimoto et Kawase, 1966, Esakia 5: 40(Korea).

Crioceris orientalis choi: Ohno, 1967, Nat. & Ins. 2(4): 12-13 (Korea).

Crioceris duodecimpunctata: Ohno, 1967, Ibid. 2(5): 28 (Korea).

Crioceris duodecimpunctata dodecastigma + C. orientalis choi: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393(C. Korea).

Crioceris duodecimpunctata dodecastigma + C. orientalis choi: Jolivet, 1973, Cah, Pac. 17: 258(Corée).

Crioceris duodecimpunctata: Lopatin, 1975, Ins. Mong. 3: 193(Korea).

Crioceris quatuordecimpunctata dodecastigma: Takizawa, 1980, Nat. & Lif. 10(2): 1<sup>3</sup>.

Locality: GB: Mt. Palgongsan (Palkong-san 3).

GG: Mt. Soyosan (Mt. Syôyô-Zan 1).

HB: Cheongjin (Seishin 2).

Distribution: Korea, China (Manchuria), Europe.

Host: Asparagus sp.

# 2. Crioceris quatuordecimpunctata (Scopoli, 1763)

Attelabus 14-punctatus Scopoli, 1763, Ent. Carn. 1763: 37, fig. 116.

Crioceris 14-punctata var. sibirica Weise, 1887, Arch. Nat. 53: 165.

Crioceris innotaticeps Pic, 1916, Mél. Exot. Ent. 19: 17.

Crioceris 14-punctata var. tschangana Pic, 1932, Ibid. 60: 32.

Crioceris 14-punctata sibirica ff. staudingeri + C. 14. s. ff. confluenta Heinze, 1943, Stett. Ent. Ztg. 104: 101 <sup>1</sup>.

Crioceris issikii Chûjô, 1951, Kagawa Agr. Coll., Techn. Bull. 2(2): 79.

Crioceris 14-punctata ssp. mandschurica Medvedev, 1958, Ent. Arb. Mus. Frey 9(1): 107.

Crioceris quatuordecimpunctata: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 39-40, figs. 10(a), 11(a) (Korea).

Crioceris quatuordecimpunctata: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 106(Korea).

Crioceris quatuordecimpunctata: Kimoto et Kawase, 1966, Esakia 5: 402.

Crioceris quatuordecimpunctata sibirica: Ohno, 1967, Nat. & Ins. 2(4): 11-12 (Korea).

Crioceris quatuordecimpunctata: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Crioceris quatuordecimpunctata: Jolivet, 1973, Cah. Pac. 17: 258 (Corée).

Crioceris quatuordecimpunctata: Lopatin, 1975, Ins. Mong. 3: 193 (Korea).

Crioceris quatuordecimpunctata: Kimoto, 1984, Col. Jap. Col. 4: 152, pl. 29(24) (Korea).

Locality: GB: Mt. Palgongsan.

GN: Haeundae.

GW: Mt. Seolagsan.

HB: Cheongjin (Seishin 1), Unggi 2.

Distribution: Korea, Japan, N. China, U.S.S.R. (Sibera), E. Europe.

#### Ins. Koreana Series 6

Host: Asparagus officinalis Linne.

### Genus 2. Lilioceris Reitter, 1912

Lilioceris Reitter, 1912, Faun Ger. 4: 79.

## Key to Korean Subgenera of Lilioceris

## Subgenus Chujoita Monrós, 1959

Chujoita Monrós, 1959, Oper. Lill. 3: 148.

3. Lilioceris (Chujoita) gibba (Baly, 1861)

Crioceris gibba Baly, 1861, Journ. Ent. 1: 280, pl. 13, fig. 3.

Crioceris gibba var. lemoulti Pic. 1916, Mél. Exot. Ent. 19: 17.

Crioceris formosensis Chûjô, 1933, Sylvia 4: 29, fig. 1.

Lilioceris gibba: Heinze, 1943, Stett. Ent. Ztg. 104: 105 (Korea).

Lilioceris gibba: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 48-49 (Korea).

Lilioceris gibba: Cho, 1965, Sci. Techn. Nat. Sci. Kor. Univ. 7: 107 (Korea).

Lilioceris gibba: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Lilioceris gibba: Jolivet, 1973, Cah, Pac. 17: 258 (Corée).

Lilioceris (Chujoita) gibba: Kimoto et Gressitt, 1979, Pac. Ins. 20(2-3): 221 (Korea).

Distribution: Korea(?), S. China (Fukien, Kwangtung, Yunnan), Taiwan, Vietnam.

Host: Lilium sp.

### Subgenus Lilioceris Reitter, 1912

## Key to Korean species of Lilioceris

| 1     | Dorsum bicolorus   | 2    |
|-------|--|------|
| _     | Dorsum unicolorus  | 3    |
| <br>າ | Pronotum reddish; elytra blue  | llis |
| ۷.    | Elytra with an orange humeral patch  | wis  |
| <br>2 | Pronotum without a distinct longitudinal groove on center                                | 4    |
| э.    | Pronotum without a distinct longitudinal groove on center; frons divided by a strong gro | ove  |
|       | merdig   | era  |
|       |  |      |

| S.L. | $\mathbb{AN}$ . | Y.J. | $\mathbb{K}\mathbb{W}\mathbb{O}\mathbb{N}$ | S.M. | LEE: | Classification | Φĺ | the | Leafbeetles | from | Korea |
|------|-----------------|------|--|------|------|----------------|----|-----|-------------|------|-------|
|------|-----------------|------|--|------|------|----------------|----|-----|-------------|------|-------|

- -. Pronotum sparsely and finely punctured ...... sinica

### 4. Lilioceris (Lilioceries) merdigera (Linnaeus, 1758)

Chrysomela merdigera Linnaeus, 1758, Syst. Nat. ed. 10: 375.

Crioceris wagneri Jacobson, 1893, Hor. Soc. Ent. Ross. 27: 122.

Crioceris laticollis Reitter, 1893, Wiener Ent. Ztg. 12: 302.

Crioceris latior Pic, 1916, Mél. Ext. Ent. 21: 18.

Crioceris nigritarsis: Iwamoto, 1937, Kont. Kenk. 1(1): 19 1.

Crioceris nigritarsis: Iwamoto, 1937, Hir. Kont. Dok. 4(1): 25-26, fig. 1<sup>2</sup>.

Crioceris merdigera: Yuasa, 1939, Kontyû 13(5-6): 199 3.

Crioceris merdigera: Chûjô, 1940, Trans. Nat. Hist. Soc. Form. 30(204): 350-351 4.

Crioceris wagneri: Heinze, 1943, Stett. Ent. Ztg. 104: 102 5.

Crioceris merdigera: Cho, 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea).

Lilioceris merdigera: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 54 6.

Lilioceris merdigera: Nakane, 1963, Icon. Ins. Jap. Col. Nat. 2: 322, pl. 161(15) (Korea).

Lilioceris merdigera: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 107 (Korea).

Lilioceris merdigera: Zool. Soc. Kor., 1968, Nom, An. Kor. 2: 115 (Korea).

Lilioceris merdigera: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Lilioceris merdigera: Jolivet, 1973, Cah. Pac. 17: 258 (Corée).

Lilioceris merdigera: Lopatin, 1975, Ins. Mong. 3: 193 (Korea).

Lilioceris merdigera: Kimoto, 1984, Col. Jap. Col. 4: 155, pl. 30(6) (Korea).

Lilioceris merdigera: Takizawa, 1985, Nat. & Lif. 15(1): 27.

Locality: GB: Mt. Sobaegsan.

GG: Gwangneung, Mt. Myeongjisan, Mt. Soyosan (Mt. Syoya-Zan<sup>4</sup>).

 $\mathbb{GN}$ : Mt. Weonhyosan.

GW:Mt. Geumgangsan (Mt. Kongo-Zan <sup>1-2</sup>), Mt. Seolagsan (Baegdamsa <sup>7</sup>), Mt. Taebaegsan.

HB: Charyeong (Syarei <sup>3</sup>), Cheongjin (Seishin <sup>5</sup>).

JJ: Mt. Hallasan.

Distribution: Korea, Japan, China (Fukien, Hopei, Hupeh, Kirin), Taiwan, Asia, Europe, Mexico, Brazil.

Host: Lilium longiflorum Thunb. var. gigantium Hort.

Remarks: Chiksam Mines 6 is uncertainty at present geographical name.

#### 5. Lilioceris (Lilioceris) ruficollis (Baly, 1865)

Crioceris ruficollis Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 155. Crioceris sieversi Heyden, 1887, Hor. Soc. Ent. Ross. 21: 271-272 (Korea).

December 1986

### Ins. Koreana Series 6

Crioceris sieversi: Doi, 1927, Dob. Zassh. 39(466): 335 (Korea).

Crioceris sieversi: Wu, 1937, Cat. Ins. Sin. 3: 782 (Korea).

Crioceris ruficollis: Chûjô, 1940, Trans. Nat. hist. Soc. Form. 30(204): 351 1.

Crioceris ruficollis: Cho, 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea).

Lilioceris ruficollis: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 55-56 (Korea).

Lilioceris ruficollis: Nakane, 1963, Icon. Ins. Jap. Col. Nat. 2: 322, pl. 161(16) (Korea).

Lilioceris ruficollis: Cho, 1965, Sci. & Techn. Nat. Sci., Kor. Univ. 7: 107 (Korea).

Lilioceris ruficollis: Ohno, 1967, Nat. & Ins. 2(5): 26 (Korea).

Crioceris ruficollis: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Lilioceris ruficollis: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Lilioceris ruficollis: Jolivet, 1973, Cah. Pac. 17: 258 (Corée).

Lilioceris ruficollis: Kim, 1978, Distr. Atl. Ins. Kor. 2: 166, pl. 17 (CH 31) 2 - 7.

Lilioceris ruficollis: Takizawa, 1980, Nat. & Lif. 10(2): 1 8.

Lilioceris ruficollis: Kimoto, 1984, Col. Jap. Col. 4: 155, pl. 30(2) (Korea).

Locality: GB: Dansan Myeon, Mt. Palgongsan (Palkong-san 8).

GG: Mt. Cheonmasan (Ch'onmasan <sup>2</sup>), Daeseongni (Taesongni <sup>5</sup>), Gwangneung (Kwangnung <sup>4</sup>), Mt. Myeongjisan, Mt. Soyosan <sup>3</sup>, Mt. Ungilsan.

GN: Mt. Gayasan (Kayasan 6), Mt. Ongnyebong.

GW: Mt. Godaesan (Kodai-Zan '), Mt. Odaesan.

JN: Is. Hongdo, Is. Jindo, Mt. Yudalsan 7.

Distribution: Korea, Japan, China (Kekiang, Fukien, Kirin).

Host: Dioscorea sp., Lilium sp.

### 6. Lilioceris (Lilioceris) rugata (Baly, 1865)

Crioceris rugata Baly, 1865, Ann. Mag. Nat. Hist. Ser. 3, 16: 154.

Lilioceris rugata: Chûjô, 1941, Trans. Nat. Hist. Soc. Form. 31(219): 453 (Korea).

Lilioceris rugata: Goto, 1956, Col. Ill. Ins. Jap. Col., ed: 62, pl. 18(364) (Korea).

Lilioceris rugata: Nakane, 1963, Icon, Ins. Jap. Col. Nat. 2: 322, pl. 161(19) (Korea).

Lilioceris rugata: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 107 (Korea).

Lilioceris rugata: Suda, 1965, Col. Encycl. Ins.: 551 (Korea).

Lilioceris rugata: Ohno, 1967, Nat. & Ins. 2(5): 26 (Korea).

Lilioceris rugata: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Lilioceris rugata: Jolivet, 1973, Cah, Pac. 17: 258 (Corée).

Lilioceris rugata: Ed. Dep. Ho., 1979, Ill. Ins. Jap. Stud. ed: 429, fig. (2435) (Korea).

## Distribution: Japan.

Remarks: The occurrence of this species in Korea is questionable and this species is restricted to Japan at present.

#### 7. Lilioceris (Lilioceris) scapularis (Balv. 1859)

Crioceris scapularis Baly, 1859, Ann. Mag. Nat. Hist. ser. 3, 3: 195.

Crioceris scapularis: Doi, 1926, Kontyu Sek. 30(346): 185 1.

Crioceris scapularis: Doi, 1927, Dob. Zassh. 39(466): 326, 335<sup>2</sup>.

Crioceris scapularis: Matsumura, 1931, 6000 Ill. Ins. Jap.: 231, fig. (652) (Korea).

Crioceris scapularis: Chûjô, 1940, Trans. Nat. Hist. Soc. Form. 30(204): 351 3.

Lilioceris scapularis: Heinze, 1943, Stett. Ent. Ztg. 104: 101 4.

Crioceris scapulris(sic): Cho, 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea).

Crioceris scapularis: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 56 (Korea).

Lilioceris scapularis: Nakane, 1963, Icon. Ins. Jap. Col. nat. 2: 322, pl. 161(17) (Korea).

Lilioceris scapularis: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 107 (Korea).

Lilioceris scapularis: Ohno, 1967, Nat. & Ins. 2(5): 26 (Korea).

Crioceris scapularis: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116. (Korea).

Lilioceris scapularis: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 378, 392-393, pl. 11(3) (C. Korea).

Lilioceris scapularis: Jolivet, 1973, Cah. Pac. 17: 258 (Corée).

Lilioceris scapularis: Kim, 1978, Distr. Atl. Ins. Kor. 2: 167, pl. 17(CH 32) 5 - 13.

Lilioceris (Lilioceris) scapularis: Kimoto et Gressitt, 1979, Pac. Ins. 20(2-3): 230 (Korea). Lilioceris scapularis: Kimoto, 1984, Col. Jap. Col. 4: 155, pl. 30(3) (Korea).

Locality: GB: Daegu, Mt. Sobaegsan, Mt. Sudosan.

GG: Mt. Cheonmasan (Ch'onmasan 10), Cheongpyeong (Ch'ongpyong 9), Mt. Dobongsan (Tobongsan 11), Iilyeong (Iillyong 12), Gwangneung (Kwangnung 6), Mt. Soyosan 8 (Mt. Syôyô-Zan 3), Suweon 1-2, Mt. Ungilsan, Mt. Wangbangsan 7.

GW:Gangchon (Kangch'on <sup>5</sup>).

HN: Weonsan (Gensan ⁴).

JN: Mt. Mudeungsan.

Distribution: Korea, Japan, China (Chekiang, Fukien, Hainan I., Kwangtung), Taiwan, Thailand, Vietnam.

### 8. Lilioceris (Lilioceris) sinica (Heyden, 1887)

Crioceris sinica Heyden, 1887, Hor. Soc. Ent. Ross. 21: 270-271 (Korea).

Crioceris chinensis Jacoby, 1888, Proc. Zool. Soc. Lond. 1888: 340.

Crioceris theana Reitter, 1898, Wiener Ent. Ztg. 17: 22.

Crioceris sinica: Doi, 1927, Dob. Zassh. 39(466): 335 (Korea).

Crioceris subpolita (nec Motsch.): Cho, 1934, Chosen Nat. Hist. Soc., Journ. 17: 70 (Korea).

Crioceris sinica: Wu, 1937, Cat. Ins. Sin. 3: 782 (Korea).

Crioceris rugata (nec Baly): Chûjô, 1941, Trans. Nat. Hist. Soc. Form. 31: 453 (Korea).

Crioceris subpolita (nec Motsch.): Ohane, 1941, Sci. Rep. Keit. 6: 26 (Korea).

Crioceris chinensis Gressitt, 1942, Lingn. Sci. Journ. 20(2-4): 297.

## Ins. Koreana Series 6

Lilioceris rugata ssp. sparsipunctata Medvedev, 1958, Ent. Arb. Mus. Frey 9(1): 111. Lilioceris sinica: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 58 (Korea). Lilioceris sinica: Cho, 1965, Sci, & Techn. Nat. Sci. Kor. Univ. 7: 107 (Korea).

Crioceris sinica: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Lilioceris sinica: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Lilioceris sinica: Jolivet, 1973, Cah. Pac. 17: 258 (Corée).

Locality: GG: Gwangneung. GW:Mt. Seolagsan.

Distribution: Korea, China (Chekiang, Fukien, Hopei, Hupeh, Kirin, Manchuria, Shantung), U.S.S.R. (E. Siberia).

## Tribes Lemiini Heinze, 1962

## Kev to Korean Genera of Lemiini

1. Occiput abbreviated, wider than long, with sides forming a front angle of more than 90° ...... Oulema -. Occiput not abbreviated, not wider than long, with sides forming a front angle of less 

#### Genus 3. Lema Fabricius, 1798

Lema Fabricius, 1798, Suppl. Ent. Syst.: 90. Sucatolema Pic, 1928, Bull. Soc. Ent. Fr. 1928: 96.

#### Key to Korean Subgenera of Lema

- 1. Elytra with a short scutellar row of punctures, or inner rows of punctures confused
- -. Elytra without scutellar row of punctures; punctures always regularly arranged in longitudinal rows, even in basal portion, and without extra punctures except for minute
- 2. Punctures of scutellar row similar in size to those of neighboring rows; pronotum with
- -. Punctures in scutellar row much smaller than those of other rows; pronofum without

### Subgenus *Petauristes* Latreille, 1829

Petauristes Latreille, 1829, in Cuvier Regn. An. 5: 136. Bradylema Weise, 1901, Arch. Nat. 67: 146.

Pseudolema (nec Jacoby, 1903) Pic, 1928, Bull. Soc. Ent. Fr. 1928: 96. Bradylemoides Heinze, 1930, Rev. Zool.-Bot. Afr. 20(1): 28. Enoplolema Heinze, 1943, Ent. Blatt. 39: 23.

# Key to Korean species of Petauristes

- 2. Ventral surfaces blackish, legs entirely back; length 5.0-6.0 mm .......... honorata

## 9. Lema (Petauristes) adamsii Baly, 1865

Lema adamsii Baly, 1865, Ann. Mag. Nat. Hist. 3(16): 156.

Lema adamsi (sic): Doi, 1927, Dob. Zassh. 39(466): 335 (Korea).

Lema adamsi (sic): Wu, 1937, Cat. Ins. Sin. 3: 783 (Korea).

Lema trapezinotata Gressitt, 1942, Lingn. Sic. Journ. 20(2-4): 320, pl. 18(4).

Lema adamsi (sic): Nakane, 1963, Icon. Ins. Jap. Col. nat. 2: 323, pl. 162(5) (Korea).

Lema adamsi (sic): Takizawa, 1980, Nat. & Lif. 10(2): 2 1 - 2.

Lema (Petauristes) adamsii: Kimoto, 1984, Col. Jap. Col. 4: 157, pl. 30(16) (Korea).

Locality: CB: Mt. Deogsungsan.

GB: Daegu (Dongmeong <sup>1</sup>), Mt. Hwanghaksan, Mt. Naeyeonsan, Mt. Palgongsan (Palkong-san <sup>2</sup>).

GN: Mt. Geumjeongsan, Is. Namhaedo, Mt. Ongnyebong, Mt. Weonhyosan.

JB: Mt. Naejangsan.

JN: Is. Jindo, Mt. Jogyesan.

Distribution: Korea, Japan, China (Chekiang, Fukien, Kiangsi, Kwangtung).

### 10. Lema (Petauristes) fortunei Baly, 1859

Lema fortunei Baly, 1859, Trans. Ent. Soc. Lond. 2(5): 148.

Lema fortunei: Ohno, 1967, Nat. & Ins. 2(3): 16 (Korea).

Aulacophora nigripennis (nec Motsch.): Kim, 1978, Distr. Atl. Ins. Kor. 2: 136, pl. 15 (CH 3) <sup>1</sup>.

Lema fortunei: Takizawa, 1980, Nat. & Lif. 10(2): 2<sup>2</sup>.

Lema fortunei: Takizawa, 1985, Ibid, 15(1): 2 3 - 4.

Locality: CG: Mt. Songnisan.

GB: Dansan Myeon, Mt. Hwanghagsan, Mt. Palgongsan (Palkong-san<sup>2</sup>,

#### Ins. Koreana Series 6

Palkongsan<sup>3</sup>), Mt. Sambangsan.

GG: Mt. Cheonmasan, Gwangneung, Mt. Myeongjisan, Mt. Soyosan, Suweon (Suwon 4), Mt. Ungilsan, Mt. Wangbangsan, Mt. Yongmunsan.

GN: Mt. Gajisan, Mt. Jirisan, Samnam Myeon, Mt. Yeongchwisan.

GW: Chugogni.

JB: Mt. Naejangsan<sup>1</sup>.

JN: Is. Jindo, Mt. Yudalsan.

Distribution: Korean, Japan, China (Anhwei, Chekiang, Fukien, Hupeh, Kwangtung, Sikang, Szechuan).

Host: Dioscorea sp.

# 11. Lema (Petauristes) honorata Baly, 1873

Lema honorata Baly, 1873, Trans. Ent. Soc. Lond. 1873: 73.

Lema infracyanea Pic, 1924, Mél. Exot. Ent. 41: 11.

Lema honorata: Chûjô, 1940, Trans. Nat. Hist. Soc. Form. 30(204): 353 1.

Lema honorata: Ishii, 1941, Sci. Rep. Keit. 6: 10<sup>2</sup>.

Lema honorata: Yuasa, 1950, Icon. Ins. Jap. ref. 2: 1189, pl. 3417 (Korea).

Lema (Bradylema) honorata: Chûjô et Shirôzu, 1955, Sieboldia 1(3): 237-238 (Korea).

Lema honorata: Cho, 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea).

Lema honorata: Nakane, 1963, Icon. Ins. Jap. Col. nat. 2: 322, pl. 161(24) (Korea).

Lema honorata: Cho, 1965, Sci, & Techn. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Lema honorata: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Lema honorata: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (C. Korea).

Lema honorata: Kor. Soc. Pl. Prot., 1972, List Pl. Dis., Ins. Pests & Weeds Kor.: 187 (Korea).

Lema honrata: Gu, 1973, Agr. For. Inj. Ins. Kor. Col.: 121 (Korea).

Lema (Petauristes) honorata: Jolivet, 1973, Cah. Pac. 17: 259 (Corée).

Lema honorata: Kim, 1978, Distr. Atl. Ins. Kor. 2: 168, pl. 17 (CH 33) 3 - 16.

Lema honorata: Ed. Dep. Hok. 1979, Ill. Ins. Jap. stud, ed: 429, fig. 2436 (Korea).

Lema (Petauristes) honorata: Kimoto et Gressitt, 1979, Pac, Ins. 20(2-3): 237 (Korea).

Lema honorata: Takizawa, 1980, Nat. & Lif. 10(2): 2 17 - 18.

Lema (Petauristes) honorata: Kimoto, 1984, Col. Jap. Col. 4: 157, pl. 30(17) (Korea).

### Locality:

GB: Mt. Biseulsan, Daegu (Dongmeong 17, Taegu 18).

GG: Mt. Cheonmasan (Pogwangsa <sup>8</sup>, Ch'onmasan <sup>10</sup>), Mt. Hwaagsan (Mt. Kagaku <sup>2</sup>, Hwaaksan <sup>16</sup>), Ilyeong (Illyong <sup>5</sup>), Gwangneung (Kwangnung <sup>7</sup>), Mt. Myeongjisan (Myongjisan <sup>6</sup>), Seongmunsa (Songmunsa <sup>9</sup>), Songchu, Mt. Soyosan (Mt. Syôyô-Zan <sup>1</sup>), Mt. Wangbangsan <sup>4</sup>.

GN: Mt. Jirisan (P'iagol 11, Yongoksa 12), Is. Namhaedo, Mt. Weonhyosan.

GW:Gangchon (Kangch'on 3)

JN: Is. Jindo, Is. Judo (Chudo 15), Is. Wando 14, Mt. Yudalsan 13.

Distribution: Korea, Japan, China (Chekiang, Fukien, Shantung), Taiwan, Thailand, Vietnam.

Host: Dioscorea pseudojaponia Hay.

## Subgenus Microlema Pic, 1932

Microlema Pic, 1932, Mél. Exot. Ent. 60: 33.

## 12. Lema (Microlema) decempunctata Gebler, 1830

Lema 10-punctate (ropunctata) Gebler 1830, Led. Reise 2: 196.

Lema decempunctata: Doi, 1927, Dob. Zassh. 39(466): 327, 335 1.

Lema decempunctata f. kiautschauna Heinze, 1943, Stett. Ent. Ztg. 104: 106.

Lema 10-punctata var. nadari Pic + L. 10. var. nankinea Pic, 1945, L'Echange 61: 13.

Lema decempunctata japonica: Yuasa, 1950, Icon. Ins. Jap. ed. ref. 2: 1189, pl. 3418

Lema decempuncta (sic): Goto, 1956, Col. Ill. Ins. Jap. Col. ed.: 62, pl. 18(360) (Korea).

Lema (Microlema) decempunctata: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 63-64, fig. 16(a) (Korea).

Lema decempunctata: Nakane, 1963, Icon, Ins. Jap. Col. Nat. 2: 323, pl. 162(6) (Korea).

Lema decempunctata: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 107-108 (Korea).

Lema decempunctata japonica: Suda, 1965, Col. Encycl. Ins.: 550-551 (Korea).

Lema decempunctata: Ohno, 1967, Nat. & Ins. 2(3): 16 (Korea).

Lema decempunctata: Cho, 1969, Ill. Encycl. Faun. & Flor. 10: 378, 392-393, pl. 73(4) (N.C. Korea).

Lema decempunctata japonica: Kor. Soc. Pl. Prot., 1972, List Pl. Dis. Ins. Pests, & Weeds Kor.: 187 (Korea).

Lema (Microlema) decempunctata: Jolivet, 1973, Cah. Pac. 17: 258 (Corée).

Lema decempunctata: Lopatin, 1975, Ins. Mong. 3: 193-194 (Korea).

Lema decempunctata: Ed. Dep. Hok., 1979, Ill. Ins. Jap. stud. ed.: 429, fig. 2437 (Korea).

Lema decempunctata: Takijawa, 1980, Nat. & Lif. 10(2): 2 2.

Lema (Microlema) decempunctata: Kimoto, 1984, Col. Jap. Col. 4: 157, pl. 30(18) (Korea).

Lema (Microlema) decempunctata: Takizawa, 1985, Nat. & Lif. 15(1): 2 3 - 6.

Locality: GB: Daegu (Taegu) <sup>2</sup>.

GG: Seoul 1.6.

GN: Mt. Gajisan, Jangsa <sup>4</sup>, Jangseungpo <sup>3</sup>.

HN: Weonsan (Wonsan 5).

December 1986

#### Ins. Koreana Series 6

Distribution: Korea, Japan, China (Chekiang, Hopei, Kiangsu, Sikang, Sinkiang, Szechun), Mongolia, Tibet, U.S.S.R. (E. Siberia).

Host: Lycium chinense, Thea chinensis.

## Subgenus Lema Fabricius, 1798

## Key to Korean species of Lema

| 1. | Mid tibia without a distinct spine   |
|----|--|
|    | Mid tibia with a distinct spine, pronotum and elytra entirely blue; in some case pro-  |
|    | notum, apices of elytra and base of femora reddish brown coronata                      |
| 2. | Pronotum and elytra entirely blue or blackish blue                                     |
|    | Pronotum and elytra not entirely blue, at least partly reddish 4                       |
| 3. | Pronotum very strongly and closely punctured cyanella                                  |
|    | Pronotum strongly but not closely punctured concinnipennis                             |
| 4. | Elytra bicolorous 5  |
|    | Elytra unicolorous 6   |
| 5. | Elytra blue with a broad reddish transverse band; pronotum reddish delicatula          |
|    | Elytra with a rectangular sutural fulvous marking behind base and fulvous apical area; |
|    | leg reddish brown except for apex of middle and posterior femora blackish              |
|    | scutellaris  |
| 6. | Pronotum with a weakly transverse groove anterior to middle; elytra strongly depressed |
|    | just behind base; head, antenna, legs and sterna black coreensis                       |
|    | Pronotum lacking a transverse groove anterior to middle; elytra weakly depressed just  |
|    | behind base; ventral surfaces of body black diversa                                    |
|    |  |

# 13. Lema (Lema) concinnipennis Baly, 1865

Lema concinnipennis Baly, 1865, Ann. Mag. Nat. Hist. ser. 3, 16: 157.

Lema haemorrhoidalis Weise, 1889, Hor. Soc. Ent. Ross. 23: 576.

Lema kiotoensis Pic + L. inaequalicollis Pic + L. atriventris Pic, 1924, Mél. Exot. Ent. 41: 12-13.

Lema concinnipennis: Doi, 1927, Dob. Zassh. 39(466): 326, 335 1.

Lema concinnipennis: Kuwayama, 1932, Journ. Fac. Agr., Hokk. Imp. Univ. 33(1): 69<sup>2-4</sup>.

Lema concinnipennis: Chûjô, 1940, Trans. Nat. Hist. Soc. Form. 30(204): 352 <sup>5 - 7</sup>. Lema concinnipennis Baly var. ventralis: Chûjô, 1951, Trans. Shik. Ent. Soc. 2(3): 32 (Korea).

Lema concinnipennis: Goto, 1956, Col. Ill. Ins. Jap. Col., ed: 62, pl. 18(363) (Korea). Lema concinnipennis: Cho, 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea). Lema (Lema) concinnipennis: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 65-66 (Korea).

Lema concinnipennis: Nakane, 1963, Icon. Ins. Jap. Col. nat. 2: 322, pl. 161(23)

Lema concinnipennis: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Lema concinnipennis: Suda, 1965, Col. Encycl. Ins.: 551 (Korea).

Lema concinnipennis: Ohno, 1967, Nat. & Ins. 2(3): 17 (Korea).

Lema concinnipennis: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Lema concinnipennis: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (C.S. Korea).

Lema concinnipennis: Kor. Soc. Pl. Prot., 1972, List. Pl. Dis. Ins. Pests, & Weeds Kor.: 189 (Korea).

Lema (s. str.) concinnipennis: Jolivet, 1973, Cah. Pac. 17: 258 (Corée).

Lema concinnipennis: Jolivet, 1974, Kor. Journ. Ent. 4(2): 97 8 - 9.

Lema concinnipennis: Kim, 1978, Dist. Atl. Ins. Kor. 2: 169, pl. 17 (CH 34) 10 - 38.

Lema concinnipennis: Takizawa, 1980, Nat. & Lif. 10(2): 1 39 - 42.

Lema concinnipennis: Lee et Kwon, 1981, Kor. Ass. Cons. Nat. 19: 155 43 - 44.

Lema (Lema) concinnipennis: Kimoto, 1984, Col. Jap. Col. 4: 156, pl. 30(10) (Korea).

Locality: CB: Goegogni (Koegongni 27), Mt. Deogsungsan, Mt. Songnisan.

CN: Mt. Gyeryongsan (Kapsa 26), ? (Teisiri 5).

- GB: Chilgog, Chupungryeong, Daegu (Taegu <sup>39</sup>, Dongmeong <sup>42</sup>), Is. Dogdo <sup>44</sup> (Is. Dockdo <sup>9</sup>), Gumi (Kumi <sup>40</sup>), Mt. Hwanghagsan, Mt. Palgongsan (Palkong-san <sup>41</sup>), Sunheung Myeon, Is. Ulreungdo <sup>43</sup> (Is. Dagelet <sup>8</sup>, Ullungdo <sup>28</sup>, Sadong <sup>29</sup>, Chodong <sup>30</sup>, Chusan <sup>31</sup>).
- GG: Mt. Aengmubong <sup>17</sup>, Mt. Baegunsan, Mt. Bughansan (Bukhansan <sup>15</sup>), Byeogjea (Pyokche <sup>16</sup>), Mt. Cheonmasan (Pogwangsa <sup>18</sup>, Ch'onmasan <sup>19</sup>), Mt. Dobongsan (Tobongsan <sup>14</sup>), Is. Ganghwado, Gwangneung (Kwangnung <sup>21</sup>), Mt. Myeongjisan (Myongjisan <sup>20</sup>), Namhansanseong (Namhansansong <sup>22</sup>), Seoul <sup>1-2</sup> (Keizyo <sup>6</sup>, Seoul Uidong <sup>23</sup>, Namsan <sup>24</sup>), Songchu, Mt. Soyosan, Mt. Yongmunsan <sup>25</sup>.
- GN: Mt. Gayasan, Mt. Geumjongsan, Geumsan, Mt. Jirisan, Masan, Mt. Ongnyebong, Mt. Weonhyosan.
- GW: Mt. Chiagsan (Ch'iaksan <sup>12</sup>), Mt. Obongsan, Mt. Odaesan, Mt. Palbongsan, Samseongni, Mt. Seolagsan, Seongnam (Songnam <sup>13</sup>), Sogeumgang (Sogumgang <sup>11</sup>).
- HB: Daeyudong <sup>3</sup> (Taeyudong <sup>37</sup>).

HN: Sambang 10.

- JB: Dongjin Myeon <sup>4</sup> (Tongjinmyon <sup>38</sup>), Mujugucheondong (Mujukuch'ondong <sup>32</sup>), Mt. Naejangsan (Mt. Naizo-Zan <sup>7</sup>).
- JJ: Mt. Hallasan (Kwanumsa), Seogwipo.
- JN: Is. Hongdo <sup>33</sup>, Is. Jindo, Is. Soheugsando (Sohuksando <sup>34</sup>), Mt. Yudalsan <sup>35</sup>.

Distribution: Korea, Japan, China (Chekiang, Fukien, Hopei, Hupeh, Szechuan).

Host: Commelina communis Linne.

## 14. Lema (Lema) coreensis Monrós, 1958

Lema coreensis Monros, 1958, Opera Lill.. 3: 182.

Lema coreana (nec Pic) Chûjô, 1933, Sylvia 4(1): 30 (Corea).

Lema (Lema) peninsularis Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 70 (Korea).

Lema peninsularis: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Lema peninsularis: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Lema peninsularis: Jolivet, 1973, Cah. Pac. 17: 259 (Corée).

Distribution: Korea.

## 15. Lema (Lema) coronata Baly, 1873

Lema coronata Baly, 1873, Trans. Ent. Soc. Lond. 1873: 72.

Lema spinipes Pic, 1938, Ark. Zool. 30A (13): 16.

Lema coronata: Jolivet, 1974, Kor. Journ. Ent. 4(2): 98 <sup>1</sup>.

Lema coronata: Jolivet, 1975, Bull. Soc. Linn. Lyon. 44(2): 64 <sup>2</sup>.

Locality: GB: Dansan Myeon, Mt. Palgongsan.

GN: Mt. Jirisan.

GW: Yanggu.

JJ: Is. Chejudo 1 (Quelpart 2).

JN: Is. Hongdo.

Distribution: Korea, Japan, China (Fukien, Hupeh, Kiangsu, Kwangtung).

Host: Commelina communis Linné.

### 16. Lema (Lema) cyanella (Linnaeus, 1758)

Chrysomela cyanella Linnaeus, 1758, Syst. Nat. ed. 10: 376.

Lema (Lema) cyanella: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 66-67 (Korea).

Lema Cyanella(sic): Cho, 1965, Sci. & Tcchn. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Lema cyanella: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (Korea).

Lema (s. str.) cyanella: Jolivet, 1973, Cah, Pac. 17: 258 (Coree).

Lema cyanella: Lopatin, 1975, Ins. Mong. 3: 194 (Korea).

Locality: GB: Mt. Juwangsan.

GW: Mt. Daeamsan, Samseongni, Mt. Seolagsan.

JJ: Seogwipo.

Distribution: Korea, China (Kirin, Liaoning, Sinkiang), Mongolia, Europe.

Host: Cirsium arvense Linne.

Remarks: Lema cirsicola Chujo was recorded from Imgye-myeon by Kim (1978), but there is a possibility that this may be the preceding species.

## 17. Lema (Lema) delicatula Baly, 1873

Lema delicatula Baly, 1873, Trans. Ent. Soc. Lond. 1873: 75.

Lema delicatura (sic): Takizawa, 1980, Nat. & Lif. 10(2): 2 1 - 2.

Lema (Lema) delicatula: Kimoto, 1984, Col. Jap. Col. 4: 157, pl. 30(15) (Korea).

Lema (Lema) delicatura (sic): Takizawa, 1985, Nat. & Lif. 15(1): 2<sup>3</sup>.

Locality: GB: Daegu, Gumi (Kumi nr. Taegu ¹), Mt. Hwanghagsan, Mt. Palgongsan (Palkong-san ², Pagesa ³), Mt. Sogbaegsan.

GG: Mt. Cheonmasan.

GN: Mt. Yeongchwisan.

Distribution: Korea, Japan, China (Fukien).

Host: Commelina sp.

## 18. Lema (Lema) diversa Baly, 1873

Lema diversa Baly, 1873, Trans. Ent. Soc. Lond. 1873: 71.

Lema chinensis Jacoby, 1890, Entomologist 23: 85.

Lema coreana Pic, 1924, Mél. Exot. Ent. 41: 13 1.

Lema diversa: Doi, 1927, Dob. Zassh. 39(466): 326-327, 335<sup>2-3</sup>.

Lema diversa: Kuwayama, 1932, Journ. Fac. Agr., Hokk. Imp. Univ. 33(1): 78 4 - 6.

Lema diversa: Haku, 1936, Journ. Chos. Nat. Hist. Soc. 21: 123 7.

Lema diversa: Nagaoka, 1940, Kontyu, Kai 8(77): 471 8.

Lema diversa: Chûjô, 1940, Trans. Nat. Hist. Soc. Form. 30(204): 352-3539 -20.

Lema diversa: Ishii, 1941, Sci. Rep. Keit. 6: 10<sup>21</sup>.

Lema diversa: Chûjô, 1951, Trans. Shik. Ent. Soc. 2(3): 32 (Korea).

Lema diversa: Goto, 1956, Col. Ill. Ins. Jap. Col. ed.: 62, pl. 18(361) (Korea).

Lema diversa: Cho, 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea).

Lema diversa: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 67, figs. 10(d), 16(c), 17(a) 22 - 24.

Lema diversa: Nakane, 1963, Icon. Ins. Jap. Col. nat. 2: 323, pl. 162(1) (Korea).

Lema diversa: Cho, 1965, Sco. & Tech. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Lema diversa: Ohno, 1967, Nat. & Ins. 2(3): 18 (Korea).

Lema diversa: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Lema diversa: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 392-393 (N.C.S. Korea).

Lema (s. str.) diversa: Jolivet, 1973, Cah. Pac. 17: 259 (Corée).

Lema diversa: Jolivet, 1974, Kor. Journ. Ent. 4(2): 97 25 - 26.

Lilioceris rugata (nec Baly): Kim, 1978, Distr. Atl. Ins. Kor. 2: 165, pl. 17 (CH 30) 27.

Lema diversa: Takizawa, 1980, Nat. & Lif. 10(2): 2<sup>28-31</sup>.

Lema diversa: Lee et Kwon, 1981, Kor. Ass. Cons. Nat. 19: 155 <sup>32 - 33</sup>. Lema (Lema) diversa: Kimoto, 1984, Col. Jap. Col. 4: 156, pl. 30(11) (Korea). Lema (Lema) diversa: Takizawa, 1985, Nat. & Lif. 15(1): 2 <sup>34</sup>.

- Locality: CB: Mt. Deogsungsan, Mt. Songinsan.
  - CN: Mt. Gyeryongsan, ? (Teisiri 17).
  - GB: Chupungryeong, Daegu (Taikyu <sup>7</sup>, Taegu <sup>27</sup>, Dongmeong <sup>30</sup>), Dansan Meyon, Is. Dogdo <sup>32</sup> (Is. Dockdo <sup>26</sup>), Gachang Myeon, Gumi (Kumi <sup>28</sup>), Mt. Hwanghagsan, Jilyang Myeon, Mt. Juwangsan, Mt. Naeyeonsan, Mt. Palgongsan (Palkong-san <sup>29</sup>), Mt. Sobaegsan, Is. Ulreungdo <sup>31</sup> (Is. Dagelet <sup>25</sup>).
  - GG: Mt. Aengmubong, Mt. Baegunsan, Mt. Bughansan (Mt. Hokukan-Zan <sup>14</sup>), Mt. Cheonmasan, Mt. Dobongsan, Mt. Hwaagsan (Mt. Kagaku <sup>21</sup>), Mt. Myongjisan, ? (Sekirison <sup>18</sup>), Seoul <sup>3 · 5 · 24 · 33 · 34</sup> (Keizyo <sup>9 · 19</sup>), Mt. Soyosan, Suwon (Suigen <sup>10 · 23</sup>), Mt. Unagsan, Mt. Yongmunsan.
  - GN: Busan (Fusan '), Mt. Gajisan, Mt. Jirisan, Masan, Samnam Myeon, Mt. Weonhyosan.
  - GW: Mt. Chiagsan, Mt. Geumgangsan (Mt. Kongo-Zan 11 · 22 ), Mt. Odaesan, Samseongni, Mt. Seolagsan, Sogeumgang.
  - HB: ? (Bunheiri 15), ? (Kokai 13), Mt. Myohyangsan (Mt. Myoko-Zan 8 · 16).
  - HN: Weonsan 2 · 4 (Genzan 12).
  - JB: Dongjin Myeon 6, Mt. Naejangsan (Mt. Naizo-Zan 20).
  - J.J: Jungmun, Seogwipo.
  - JN: Is. Daeheugsando, Is. Hongdo, Is. Jindo, Mt. Yudalsan.

Distribution: Korea, Japan China (Anhwei, Chekiang, Fukien, Hupeh, Kiangsi, Kirin, Kwangtung, Szechuan).

Host: Chrysanthemum, Commelina communis Linne.

### 19. Lema (Lema) scutellaris (Kraatz, 1879)

Crioceris scutellaris Kraatz, 1879, Deut. Ent. Zeit. 23: 130, pl. 2, fig. 4.

Lema scutellaris: Doi, 1927, Dob. Zassh. 39(466): 327-328, 335 (Korea).

Lema scutellaris: Goto, 1959, Col. Ill. Ins. Jap. Col., ed: 62, pl. 18(362) (Korea).

Lema scutellaris: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 72 (Korea).

Lema scutellaris: Nakane, 1963, Icon. Ins. Jap. Col. nat. 2: 323, pl. 162(3) (Korea).

Lema scutellaris: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Lema scutellaris: Ohno, 1967, Nat. & Ins. 2(3): 18 (Korea).

Lema scutellaris: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Lema (s. str.) scutellaris: Jolivet, 1973, Cah. Pac. 17: 259 (Corée).

Lema (Lema) scutellaris: Kimoto, 1984, Col. Jap. Col. 4: 157, pl. 30(14) (Korea).

Lema (Lema) scutellaris: Takizawa, 1985, Nat. & Lif. 15(1): 2 (Korea).

Locality: GG: Suweon. GW: Yanggu.

Distribution: Korea, Japan, U.S.S.R. (Amurland).

Host: Commelina communis Linne.

#### Genus 4. Oulema DesGozis 1886

Oulema DesGozis, 1886, Rech. 1'Espece Typiq. 33. Ulema Bedel, 1889, Faun. Col. Bass. Seine 5: 116. Hapsidolema Heinze, 1927, Ent. Blatt. 23(4): 162. Incisophthalma Heinze, 1929, Deutsch. Ent. Zeitschr. 289. Xoidolema Heinze, 1931, Wien. Ent. Ztg. 48(4): 206. Conradsia Pic, 1936, Mél. Exot. Ent. 68: 10.

## Key to Korean species of Oulema

| 1. | Basal part of pronotum closely punctured; basal groove not distinct 2               |
|----|---|
|    | Basal part of pronotum nearly impunctate; basal groove distinct; dorsum yellowish   |
|    | brown; suture and external margin of elytra black; length 3.2-3.4 mm                |
|    | atrosuturalis   |
| 2. | Entirely, or almost entirely, blue or blackish blue                                 |
|    | Not entirely or blackish blue, at least legs reddish brown                          |
| 3. | Prothorax oblong, and broadest at middle; pronotal punctures in central portion ar- |
|    | ranged in 3 rows erichsoni  |
|    | Prothorax not oblong, and broadest at anterior part; pronotal punctures in central  |
|    | portion arranged in a single row viridula   |
| 4. | Pronotum and elytra blue 5  |
|    | Pronotum reddish brown and elytra blue; pronotal punctures not arranged in          |
|    | longitudinal row  |
| 5. | Pronotum finely and closely punctured at side and sparsely above; dorsal punctures  |
|    | stronger and mostly in a single row tristis   |
|    | Pronotum finely and closely punctured throught; dorsal punctures stronger but not   |
|    | sparse or in a single row   |

### 20. Oulema atrosuturalis (Pic, 1923)

Lema downesi (nec Baly): Baly, 1873, Trans. Ent. Soc. Lond. 1873: 75. Lema atrosuturalis Pic, 1923, Mél. Exot. Ent. 40: 18.

Locality: JN: Is. Jeobdo.

Distribution: Korea (new record), Japan, China (Fukien, Kiangsu, Kwangtung, Szechuan,

Yunnan), Taiwan, Vietnam, Thailand.

### 21. Oulema dilutipes (Fairmare, 1888)

Lema dilutipes Fairmare, 1888, Revue, d'Ent. Caen. 7: 149.

Oulema dilutipes: Ohno, 1967, Nat. & Ins. 2(4): 10 (Korea).

Oulema dilutipes: Kimoto, 1984, Col. Jap. Col. 4: 158, pl. 30(20) (Korea).

Locality: GB: Daegu, Gamcheon Myeon, Mt. Palgongsan. GN: Mt. Jirisan.

Distribution: Korea, Japan, China (Hopei, Hupeh).

Host: Sorghum bicolor Moench.

### 22. Oulema erichsoni (Suffrian, 1841)

Lema erichsoni Suffrian, 1841, Stett, Ent. Ztg. 2: 104. Oulema erichsoni: Kim, 1978, Distr. Atl. Ins. Kor. 2: 169 1 - 2.

Locality: GB: Mt. Juwangsan.

GG: Mt. Cheonmasan (Ch'onmasan <sup>2</sup>), Gwangneung (Kwangnung <sup>1</sup>).

GN: Mt. Jirisan. GW: Mt. Odaesan.

Distribution: Korea, Japan, China (Manchuria), U.S.S.R. (Siberia).

## 23. Oulema oryzae (Kuwayama, 1951)

Lema oryzae Kuwayama, 1931, Ins. Matsumurana 5(3): 115.

Lema oryzae: Chûjô, 1933, Sylvia 4(1): 31 (Coréa).

Lema oryzae: Yuasa, 1950, Icon. Ins. Jap. ref. 2: 1189, pl. 3419 (Korea).

Lema rugifrons Jakob, 1954, Kol. Rdsch. 32: 102.

Oulema oryzae: Nakane, 1963, Icon. Ins. Jap. Col. nat. 2: 323, pl. 162(8) (Korea).

Oulema oryzea (sic): Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Oulema oryzae: Ohno, 1967, Nat. & Ins. 2(4): 9-10 (Korea).

Lema oryzae: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Oulema oryzea (sic): Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 394-395 (Korea).

Lema oryzae: Kor. Soc. Pl. Prot., 1972, List. Pl. Dis. Ins. Pests, & Weeds. Kor.: 187 (Korea).

Lema oryzea (sic): Gu, 1973, Agr. For. Inj. Ins. Kor. Col.: 121-122 (Korea).

Oulema oryzae: Jolivet, 1973, Cah. Pac. 17: 259 (Corée).

Oulema oryzae: Kimto, 1984, Col. Jap. Col. 4: 157-158, pl. 30(19) (Korea).

Locality: GB: Anjeong Myeon, Daegu, Dansan Myeon. GW: Yanggu.

Distribution: Korea, Japan, China (Fukien, Hupeh, Kwangtung, Kweichow, Yunnan), Taiwan.

Host: Orvza sativa Linnaeus.

#### 24. Oulema tristis (Herbst, 1786)

Crioceris tristis Herbst, 1786, In Ruessly, Arch. Ins. 7: 165.

Lema flavipes Suffrian, 1841, Stett. Ent. Ztg. 2: 100.

Lema tristis: Chûjô, 1933, Sylvia 4(1): 40 1.

Lema tristis: Chûjô, 1940, Trans. Nat. Hist. Soc. Form. 30(204): 353 2.

Lema tristis: Chûjô, 1941, Ibid. 31: 454 (Korea).

Lema (s. str.) tristis: Chûjô, 1954, Trans. Shik. Ent. Soc. 4(4): 52 (Korea).

Lema tristis: Cho. 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea).

Oulema tristis: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 1A: 78-79, fig. 18(e) (Korea).

Oulema tristis: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 108 (Korea).

Oulema tristis: Ohno, 1967, Nat. & Ins. 2(4): 10 (Korea).

Lema tristis: Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea).

Oulema tristis: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 394-395 (Korea).

Oulema tristis: Jolivet, 1973, Cah. Pac. 17: 259 (Corée).

Oulema tristis: Takizawa, 1980, Nat. & Lif. 10(2): 2<sup>3</sup>.

Oulema tristis: Kimoto, 1984, Col. Jap. Col. 4: 158 (Korea).

Lema (Oulema) tristis: Mohr, 1985, Beitr. Ent. Berlin 35(2): 246 (Korea).

Locality: GB: Daegu (Taegu 3).

GN: Mt.-Jirisan.

HB: Mt. Myohyangsan (Mt. Myôkô-Zan <sup>2</sup>), Sangsambong (Zyôsambô <sup>1</sup>).

JB: Mt. Mayisan.

Distribution: Korea, Japan, China (Hopei, Kansu, Kirin, Shantung), Mongolia, U.S.S.R. (Siberia), Europe.

### 25. Oulema viridula (Gressitt, 1942)

Lema viridula Gressitt, 1942, Lingn. Sci. Journ. 20(2-4): 322.

Lema pygmaea (nec Kraatz): Chûjzô, 1940, Tran. Nat. Hist. Soc. Form. 30(204): 353 1.

Lema cyanella (nec L.): Chûjô, 1941, Ibid. 31(219): 453 (Korea).

Lema pygmaea (nec Kraatz): Cho, 1957, Hum. & Sci., Nat. Sci. Kor. Univ. 2: 235 (Korea).

Oulema viridula: Gressitt et Kimoto, 1961, Pac. Ins. Mon. 113: 79, figs. 18(f), 19(b) (Korea).

Ins. Koreana Series 6 December 1986

Oulema viridula: Cho, 1965, Sci. & Techn. Nat. Sci. Kor. Univ. 7: 108-109 (Korea). Lema pygmaea (nec Kraatz): Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 116 (Korea). Oulema viridula: Cho, 1969, Ill. Encycl. Faun. & Flor. Kor. 10: 394-395 (Korea). Oulema viridula: Jolivet, 1973, Cah. Paç. 17: 259 (Corée).

Oulema viridula: Takizawa, 1980, Nat. & Lif. 10(2):  $2^{2-3}$ .

Locality: GB: Daegu (Taegu <sup>2</sup>), Mt. Juwangsan, Mt. Palgongsan (Palkong-san <sup>3</sup>), Mt. Sobaegsan.

GG: Mt. Cheonmasan, Gwangneung, Mt. Myeongjisan. Mt. Soyosan (Mt. Syoyo-Zan <sup>1</sup> ).

GW: Mt. Chiagsan.

Distribution: Korea, China (Hupeh, Kiangsi, Kirin).

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